

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.

Application Serial Number: 10/759,548 A
Source: IHW
Date Processed by STIC: 12-27-04

ENTERED



IFWO

RAW SEQUENCE LISTING

DATE: 12/27/2004

PATENT APPLICATION: US/10/759,548A

TIME: 11:26:12

Input Set : A:\A36125_SEQLIST.TXT

Output Set: N:\CRF4\12272004\J759548A.raw

4 <110> APPLICANT: Biogemma
 5 Rogowsky
 6 Heckel
 7 Perez
 9 <120> TITLE OF INVENTION: Nucleic acids encoding an ISUM2A
 10 polypeptide and use of said nucleic acids to obtain
 11 transformed plants producing grains altered in germ
 12 development.
 14 <130> FILE REFERENCE: A36125 PCT-USA-A
 16 <140> CURRENT APPLICATION NUMBER: 10/759,548A
 17 <141> CURRENT FILING DATE: 2004-01-16
 19 <150> PRIOR APPLICATION NUMBER: PCT/FR02/02553
 20 <151> PRIOR FILING DATE: 2002-07-17
 22 <150> PRIOR APPLICATION NUMBER: WO 03/008585
 23 <151> PRIOR FILING DATE: 2003-01-30
 25 <150> PRIOR APPLICATION NUMBER: FR 01/09631
 26 <151> PRIOR FILING DATE: 2001-07-18
 28 <160> NUMBER OF SEQ ID NOS: 24
 30 <170> SOFTWARE: FastSEQ for Windows Version 4.0
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 34 <212> TYPE: DNA
 35 <213> ORGANISM: Zea mays
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 40 cttgtgactt agtttgggac cctccttttc tattgaaagg ggttcagatc gctggggacc 180
 41 aagactgaag gaaaaggcgt ttgtcctcta gggtgggtccg gagctgtgta gccgcttagc 240
 42 ctggtcctgt accctaagcc tacatacttc accactcttg aacaggtggc ctattacctg 300
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 44 gctcgtcaag cccggttgcg catctcaaag gatcaagtgc aacagagtgt ggggtcccatg 420
 45 ggtgtgttac taaacatcaa tcttgagtca tatgcagggc aaaatcctgg ttaggcggta 480
 46 gccgaggcgt cgggtagaac accaagagac acccacacca agtgctagcg acctaaacca 540
 47 tgacatgggg gctcggggccc accagtcata ttagtggggt ggcaggcgta ggtgtgaaaa 600
 48 ggcgggatat gaaccgtcgg gcgcacgaca cacacaatga gtaccttctc aggaatccct 660
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 50 gcgtgggagc cgcagggtcaa tgagctgcat cgacataagc gacagtaagt gatctgacgg 780
 51 taagcgtaac agcagagcgtg acaccgttgg cgctagtcac aatcaagttg cttgtagcag 840
 52 gatcacagtt atgccccccc cacttgcgag ttcgtaacct ctcccagggt gggctcgggg 900
 53 gccactgtcg ataccccgta actagggttac tctctcctac tgtgtcaagg cagataacctg 960
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Cps. (6)

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66 aattcgtggg ctgaccgttg ccacaaacgg ccaagcgac gcaagcctcc ctgcaggctg 1740
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68 cattccaaat ccgcagtcg cagacgagag tggaaaggcg gcacagacag gaagagaagc 1860
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104 taggatatgg ccagcagatc gtgtatatgg ctgtgcaaga cactgttttg caccatttta 4020
105 tatatagact gcattgttta catgatgaag cttgaaatag gatatgggat gagtgcaact 4080

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108 gaccaaattt cagtgcgccc aatgcttgct tttaaaaaaa tcgtattttg caaaaaaaaa 4260
109 tttgtagtca ccaaccaa atgtgtaaca aactttcttt cctctgcttt gtgatctcca 4320
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112 atgaatggtg atccgagata gggagagggt gaaatcacga gataaaccta aacataccat 4500
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128 gctataattc actggaatgt ccggtgcacc agcggagcaa cggctacttc gcgcaatgg 5460
129 cgctgcaaa aaagctgaag aatcagatga acagtgcgcg gcagtgcgcg gcagagcaga 5520
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134 <211> LENGTH: 2004
135 <212> TYPE: DNA
136 <213> ORGANISM: Zea mays
138 <400> SEQUENCE: 2
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141 tctttgtgtg tcgtcgctcg tcaaggcgct ggcgagcgg ttccgggtga cgcggaggg 180
142 caagatcggt cggcggtgcg ccgggaagca gcacttgctc gccagaaga acaccaagcg 240
143 caagaagagg ctctcgaaga tggattcttt ctttctctcc tccactccca ctctagtgc 300
144 gctcaaattt tgttcagctg ctcttatgt cgcagctaat gacggcttgc atattagtta 360
145 ttgcctgttt taatagctgt acatagaaaa caagtcgggt gcgtctcgt aaattagatg 420
146 ctaatgtgga tttttttatg tcaatagcac attgcgctct cgtattttta ttgctcgata 480
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150 atagatggca tgaaaaagct tttggctaca attgaacttg tcgaagtcca cagattatta 720
151 tcatggtcct tatataacgt ttgtttctga aaatgaactg ttttacttgt acacataaaa 780
152 ttacctctgg aataggcat tacaattttc agaaagaagt ggggtgtgggt gtaaaacgta 840
153 ctgacctatg aacattttct gttttactcc actattgtta gtcagctaat gtattggggg 900
154 agtgcgtccc atgaattaga catcctgttc ttccattttt gtgttgatgt aataactttc 960
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164 atccttgaaa ccgtggcaat tccatttgca gtctgaactt gacgttttct tttcttctta 1560
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169 cagtatagcg atatttcaga atgagggtgca ctgcttgcta tagttgttat ttagtcgcaa 1860
170 atatgtgcaa gtaagagtgg cacttgagcc attagctcct cttaggatat ggccagcaga 1920
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176 <212> TYPE: DNA

177 <213> ORGANISM: Zea mays

179 <400> SEQUENCE: 3

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182 taccgcgagc cagcctcgca ttcccggcga aatccttctt cggcgcgccg ctggccgcca 180
183 ccgcgccctc cgtcgcgtcg ccgctcccg ccaagccggc cacctccacc acctcgctcg 240
184 aggtcgctgc ggcggggaag aagggtctac agatgaagac gcacaaggcg tcggcgaagc 300
185 ggttcggggt gacggggagg ggcaagatcg tgcggcggtg cgcggggaag cagcacttgc 360
186 tcgccaagaa gaacaccaag cgcaagaaga ggctctcgaa gatggtgcaa gtcaacaaga 420
187 gtgactacga caatgttacg ggtgcactgc cctacctcaa agtgaatagg aaagcaaact 480
188 gagagctacg tggctctcaa aaaatcatta agtttcgttc caccaaattg taattttgtg 540
189 tatcttccac tgtatttcct tctcaaaaat actgaggcat catttcaaag caagcaaaaa 600
190 acaactcctg gtatcaacag tatagcgata tttcagaatg aggtgcactg cttgctatag 660
191 ttgttatatta gtgcgaaata tgtgcaagta agagtggcac ttgagccatt agtcctctct 720
192 aggatatggc cagcagatcg tgtatatggc tgtgcaagac actgttttgc accattttat 780
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195 <210> SEQ ID NO: 4

196 <211> LENGTH: 621

197 <212> TYPE: DNA

198 <213> ORGANISM: Zea mays

200 <400> SEQUENCE: 4

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203 gaggtcgctc cggcggggaa gaagggtctac aagatgaaga cgcacaaggc gtcggcgaag 180
204 cggttccggg tgacggggag gggcaagatc gtgcggcggt gcgcccggaa gcagcacttg 240
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207 tgagagctac gtggtcttca aaaaatcatt aagtttcgtt ccaccaaatt gtaattttgt 420
208 gtatcttcca ctgtatttcc ttctcaaaaa tactgaggca tcatttcaa gcaagcaaaa 480
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214 <211> LENGTH: 143
215 <212> TYPE: PRT
216 <213> ORGANISM: Zea mays
218 <400> SEQUENCE: 5
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220 1 5 10 15
221 Ala Gly Ala Gly Ala Arg Lys Leu Pro Ala Ala Ser Leu Ala Phe Pro
222 20 25 30
223 Ala Lys Ser Phe Phe Gly Ala Pro Leu Ala Ala Thr Ala Ala Ser Val
224 35 40 45
225 Ala Ser Pro Leu Pro Arg Lys Pro Ala Thr Ser Thr Thr Ser Leu Glu
226 50 55 60
227 Val Val Ala Ala Gly Lys Lys Gly Tyr Lys Met Lys Thr His Lys Ala
228 65 70 75 80
229 Ser Ala Lys Arg Phe Arg Val Thr Gly Arg Gly Lys Ile Val Arg Arg
230 85 90 95
231 Cys Ala Gly Lys Gln His Leu Leu Ala Lys Lys Asn Thr Lys Arg Lys
232 100 105 110
233 Lys Arg Leu Ser Lys Met Val Gln Val Asn Lys Ser Asp Tyr Asp Asn
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236 130 135 140
239 <210> SEQ ID NO: 6
240 <211> LENGTH: 143
241 <212> TYPE: PRT
242 <213> ORGANISM: Zea mays
244 <400> SEQUENCE: 6
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250 35 40 45
251 Ala Ser Pro Leu Pro Arg Lys Pro Ala Thr Ser Thr Thr Ser Leu Glu
252 50 55 60
253 Val Val Ala Ala Gly Lys Lys Gly Tyr Lys Met Lys Thr His Lys Ala
254 65 70 75 80
255 Ser Ala Lys Arg Phe Arg Val Thr Arg Arg Gly Lys Ile Val Arg Arg
256 85 90 95
257 Cys Ala Gly Lys Gln His Leu Leu Ala Lys Lys Asn Thr Lys Arg Lys
258 100 105 110
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265 <210> SEQ ID NO: 7

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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 12/27/2004
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:9; N Pos. 17

VERIFICATION SUMMARY

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L:294 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:298 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:9
L:299 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0